

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference C62863PC	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No. PCT/EP2004/007679	International filing date (day/month/year) 12/07/2004	(Earliest) Priority Date (day/month/year) 10/07/2003
Applicant CYTOS BIOTECHNOLOGY AG		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☒ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☒ Certain claims were found unsearchable (See Box II).

3. ☐ Unity of invention is lacking (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

Isenbruck | Bösl | Hörschler |
 Wichmann | Huhn, Patentanwälte
 Postfach 860 880
 D-81635 München

10. Dez. 2004

Frist:
 Vorfrist:
 WV:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

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International application No.

PCT/EP2004/007679

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the International application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. type of material
 - ☒ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☒ in written format
 - ☒ in computer readable form
 - c. time of filing/furnishing
 - ☒ contained in the international application as filed
 - ☒ filed together with the international application in computer readable form
 - ☐ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

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13.12.04

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/007679

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K39/00 A61K39/002 A61K39/02 A61K39/12 A61K39/295
 A61K39/35 A61K39/36 A61P37/04 C07K14/025 C07K14/08
 C12N15/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K A61P C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, MEDLINE, BIOSIS, EMBL

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/024481 A (BACHMANN MARTIN F ; LIPOWSKY GERAD (CH); MAURER PATRICK (CH); MEIJERIN) 27 March 2003 (2003-03-27) page 9, line 4 - page 13, line 12; claim 21; examples 1-30	1-22, 26-63
X	SCHWARZ KATRIN ET AL: "Role of toll-like receptors in costimulating cytotoxic T cell responses." EUROPEAN JOURNAL OF IMMUNOLOGY, vol. 33, no. 6, June 2003 (2003-06), pages 1465-1470, XP008039398 ISSN: 0014-2980 figures 1-3; table 1 page 1465 - page 1469	1-15, 17-22, 26-39, 44-63

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

29 November 2004

Date of mailing of the international search report

13/12/2004

Name and mailing address of the ISA

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Authorized officer

Schulz, R

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
✓ A	WO 01/22972 A (COLEY PHARMACEUTICAL GMBH ; UNIV IOWA RES FOUND (US)) 5 April 2001 (2001-04-05) page 7, line 8 - line 13; table A -----	7-29
✓ A	WO 02/056905 A (LECHNER FRANZISKA ; PIOSSEK CHRISTINE (CH); RENNER WOLFGANG A (CH); BA) 25 July 2002 (2002-07-25) page 4 - page 11 -----	

INTERNATIONAL SEARCH REPORT

International application No.
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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 57 - 59, 61 and 62 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/007679

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03024481	A	27-03-2003	EP 1450856 A2	01-09-2004
			WO 03024481 A2	27-03-2003
			US 2003099668 A1	29-05-2003
WO 0122972	A	05-04-2001	AU 7615300 A	30-04-2001
			BG 106538 A	29-12-2002
			BR 0014236 A	15-10-2002
			CA 2388055 A1	05-04-2001
			CN 1454091 T	05-11-2003
			CZ 20021050 A3	15-01-2003
			EE 200200158 A	16-06-2003
			EP 1221955 A2	17-07-2002
			HU 0202639 A2	28-12-2002
			JP 2003510282 T	18-03-2003
			NO 20021453 A	27-05-2002
			NZ 517929 A	27-02-2004
			PL 354997 A1	22-03-2004
			SK 3962002 A3	01-04-2003
			TR 200200797 T2	21-10-2002
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			US 2003212026 A1	13-11-2003
			ZA 200201963 A	10-03-2003
WO 02056905	A	25-07-2002	BR 0206565 A	27-01-2004
			BR 0206566 A	27-01-2004
			CA 2433316 A1	25-07-2002
			CA 2433862 A1	25-07-2002
			CN 1487838 T	07-04-2004
			CN 1487840 T	07-04-2004
			EP 1370290 A2	17-12-2003
			EP 1353691 A2	22-10-2003
			WO 02056905 A2	25-07-2002
			WO 02056907 A2	25-07-2002
			JP 2004522735 T	29-07-2004
			JP 2004522736 T	29-07-2004
			US 2003175711 A1	18-09-2003
			US 2003175290 A1	18-09-2003
			BR 0213117 A	21-09-2004
			CA 2462857 A1	17-04-2003
			WO 03031466 A2	17-04-2003
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			BR 0213941 A	31-08-2004
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			CA 2465981 A1	15-05-2003
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			WO 03039225 A2	15-05-2003
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			EP 1441764 A2	04-08-2004
			EP 1443960 A2	11-08-2004
			US 2003157479 A1	21-08-2003
			US 2004033211 A1	19-02-2004